

BELLE PLAINE COAL GAS

(Belle Plaine, Iowa)

GENERAL DESCRIPTION

The Belle Plaine Coal Gas site is a 0.6-acre site located in the S 1/2 of the NE 1/4 of the SW 1/4 of Section 20, T82N, R12W, Benton County, Iowa. The site is owned by Alliant Energy. The site was entered on the Registry in August 1990.

SITE CLASSIFICATION

The site is classified "b" in accordance with 455B.427.3. Hazardous substances have been disposed of at the site, posing a significant threat to the environment.

TYPE AND QUANTITY OF HAZARDOUS WASTE

Iowa Electric and Power Company and its predecessors operated the Belle Plaine coal gasification plant from 1906 to 1946. During the operation of the plant, approximately 70,080 gallons of coal tar waste and an unknown amount of spent iron oxide were disposed of at the site. The gas plant was torn down in 1947. An operations and maintenance building was constructed in the 1950s. In 1970 an annex was constructed to the east.

HEALTH AND ENVIRONMENTAL IMPACTS

The Belle Plaine Coal Gas site is located within the city limits of Belle Plaine. Minnow Creek is located 600 feet south of the site. The junction of Iowa Creek and the Iowa River occurs 2.5 miles south of the site. The IES facility is using bottled water for drinking purposes because their water supply pipes travel through buried coal tar pits.

STATUS OF ASSESSMENT, MONITORING OR REMEDIAL ACTIONS

The state is the lead agency for the site.

On August 8, 1985, Iowa Electric unearthed a portion of a coal tar pit when they were searching for a gas line. The coal tar residue and soil were removed from the area, placed in 12 PCB barrels, and stored on site. In August 1987 another coal tar pit was discovered. The wastes were excavated and stored on site.

From June 1985 to June 1987 three investigations were conducted at the site. Soil, sediment, surface water, and groundwater samples were collected from the site during these investigations. Compounds detected at the site include polynuclear aromatic hydrocarbons (PAHs) which are common coal tar constituents. Some of the PAHs are carcinogenic. The compounds detected in notable quantities are listed in Table 1:

Table 1:

Acenaphthylene	Chrysene
Anthracene	Fluoranthene
Benzene	Fluorene
Benzo(a)anthracene	Indeno(1,2,3-cd)pyrene
Benzo(b)fluoranthene	Phenanthrene
Benzo(k)fluoranthene	Pyrene
Benzo(a)pyrene	

Site investigations were conducted in November and December 1991. A report was submitted to the department in late 1993. Based on the results of the investigation, further actions were recommended. The Remedial Investigation/Feasibility Study (RI/FS) reports were submitted to the department in May 1992 (RI) and August 1992 (FS).

2004: Additional source area investigations and related revised risk assessment have been conducted. An interim soil removal and site remediation are planned and ground water monitoring is on going.

2008: Additional environmental site assessment activities carried out during the fall of 2008 will be reported to the IDNR by late December 2008. No remedial activities have been scheduled yet.

